OIPE

RAW SEQUENCE LISTING   DATE: 07/05/2001
PATENT APPLICATION: US/09/881,823   TIME: 11:17:39

Input Set : A:\PTO.txt
Output Set N:\CRF3\07052001\I881823.raw

ENTERED
see page 5

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  3  <110> APPLICANT  SHI, WENYUAN
  4          ANDERSON, MAXWELL
  5          MORRISON, SHERIE
  6          TRINH, RYAN
  7          WIMS, LETITIA
  8          CHEN, LI
 10  <120> TITLE OF INVENTION: Method for the Treatment and Prevention of Dental Caries
 12  <130> FILE REFERENCE: 22851-032
C--> 14 <140> CURRENT APPLICATION NUMBER: US/09/881,823
C--> 14 <141> CURRENT FILING DATE: 2001-06-15
 14  <150> PRIOR APPLICATION NUMBER: US 07/378,577
 15  <151> PRIOR FILING DATE. 1999-08-20
 17  <160> NUMBER OF SEQ ID NOS: 32
 19  <170> SOFTWARE. PatentIn version 3.0
 21  <210> SEQ ID NO  1
 22  <211> LENGTH: 420
 23  <212> TYPE: DNA
 24  <213> ORGANISM: Murine
 26  <220> FEATURE:
 27  <221> NAME/KEY: CDS
 28  <222> LOCATION  (14)..(415)
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 33               1               5                   10
 35  ctc tgg gtt cca ggt tcc aca ggt gac att gtg ctg acc caa tct cca      97
 36  Leu Trp Val Pro Gly Ser Thr Gly Asp Ile Val Leu Thr Gln Ser Pro
 37          15                  20                  25
 39  gtt tct ttg gct gtg tct cta ggg cag agg gcc acc ata tcc tgc aga     145
 40  Val Ser Leu Ala Val Ser Leu Gly Gln Arg Ala Thr Ile Ser Cys Arg
 41      30                  35                  40
 43  gcc agt gaa agt gtt gat agt tat ggc aat agt ttt atg aac tgg tac     193
 44  Ala Ser Glu Ser Val Asp Ser Tyr Gly Asn Ser Phe Met Asn Trp Tyr
 45  45                  50                  55                  60
 47  cag cag aaa cca gga cag cca ccc caa ctc ctc atc tat cgt gca tcc     241
 48  Gln Gln Lys Pro Gly Gln Pro Pro Gln Leu Leu Ile Tyr Arg Ala Ser
 49              65                  70                  75
 51  aat cta gaa tac ggg atc cct gcc agg ttc agt ggc agt ggg tct agg     289
 52  Asn Leu Glu Tyr Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Arg
 53              80                  85                  90
 55  aca gac ttc acc ctc acc att aat cct gtg gag gct gat gat gtt gca     337
 56  Thr Asp Phe Thr Leu Thr Ile Asn Pro Val Glu Ala Asp Asp Val Ala
 57              95                  100                 105
 59  acc tat tac tgt cag caa aat aat gcg gat cct ccc acg ttc gga ggg     385
 60  Thr Tyr Tyr Cys Gln Gln Asn Asn Ala Asp Pro Pro Thr Phe Gly Gly
 61      110                 115                 120
 63  ggg acc aag ttg gaa atc aaa cgt aag tcg acgct                       420
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Input Set : A:\PTO.txt
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 64  Gly Thr Lys Leu Glu Ile Lys Arg Lys Ser
 65  125                 130
 68  <210> SEQ ID NO: 2
 69  <211> LENGTH: 134
 70  <212> TYPE: PRT
 71  <213> ORGANISM: Murine
 73  <400> SEQUENCE: 2
 75  Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro
 76  1               5                   10                  15
 79  Gly Ser Thr Gly Asp Ile Val Leu Thr Gln Ser Pro Val Ser Leu Ala
 80              20                  25                  30
 83  Val Ser Leu Gly Gln Arg Ala Thr Ile Ser Cys Arg Ala Ser Glu Ser
 84          35                  40                  45
 87  Val Asp Ser Tyr Gly Asn Ser Phe Met Asn Trp Tyr Gln Gln Lys Pro
 88      50                  55                  60
 91  Gly Gln Pro Pro Gln Leu Leu Ile Tyr Arg Ala Ser Asn Leu Glu Tyr
 92  65                  70                  75                  80
 95  Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Arg Thr Asp Phe Thr
 96              85                  90                  95
 99  Leu Thr Ile Asn Pro Val Glu Ala Asp Asp Val Ala Thr Tyr Tyr Cys
100              100                 105                 110
103  Gln Gln Asn Asn Ala Asp Pro Pro Thr Phe Gly Gly Gly Thr Lys Leu
104             115                 120                 125
107  Glu Ile Lys Arg Lys Ser
108         130
111  <210> SEQ ID NO: 3
112  <211> LENGTH: 454
113  <212> TYPE: DNA
114  <213> ORGANISM: Murine
116  <220> FEATURE:
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118  <222> LOCATION: (14)..(430)
120  <400> SEQUENCE: 3
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123              1           5                   10
125  ttc cca agc tgt gtc ctg tcc cag gtg cag ctg aag gag tca gga cct     97
126  Phe Pro Ser Cys Val Leu Ser Gln Val Gln Leu Lys Glu Ser Gly Pro
127         15                  20                  25
129  ggc ctg gtg gcg ccc tca cag agc ctg tcc atc aca tgc act gtc tca    145
130  Gly Leu Val Ala Pro Ser Gln Ser Leu Ser Ile Thr Cys Thr Val Ser
131         30                  35                  40
133  ggg ttc tca tta acc aac tat gat ata aat tgg gtt cgc cag cct cca    193
134  Gly Phe Ser Leu Thr Asn Tyr Asp Ile Asn Trp Val Arg Gln Pro Pro
135  45                  50                  55                  60
137  gga aag ggt ctg gag tgg ctg gga ata ata tgg ggt gac ggg agc aca    241
138  Gly Lys Gly Leu Glu Trp Leu Gly Ile Ile Trp Gly Asp Gly Ser Thr
139              65                  70                  75
141  aat tat cat tca gct ctc ata tcc aga ctg agc atc agc aag gat aac    289
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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/881,823

DATE: 07/05/2001
TIME: 11:17:40

Input Set : A:\PTO.txt
Output Set: N:\CRF3\07052001\I881823.raw

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142 Asn Tyr His Ser Ala Leu Ile Ser Arg Leu Ser Ile Ser Lys Asp Asn
143         80                    85                   90
145 tcc aag agc caa att ttc tta aaa ctg aac agt ctg caa act gat gac      337
146 Ser Lys Ser Gln Ile Phe Leu Lys Leu Asn Ser Leu Gln Thr Asp Asp
147         95                  100                   105
149 aca gcc acg tac tac tgt aac tac ccg tgt tta tat ttc tat ggt atg      385
150 Thr Ala Thr Tyr Tyr Cys Asn Tyr Pro Cys Leu Tyr Phe Tyr Gly Met
151         110                 115                   120
153 gac tac tgg ggt caa gga acc tca gtc acc gtc tct tca gct agc          430
154 Asp Tyr Trp Gly Gln Gly Thr Ser Val Thr Val Ser Ser Ala Ser
155 125                 130                   135
157 acaacagccc catcagtcga ccca                                           454
160 <210> SEQ ID NO: 4
161 <211> LENGTH: 139
162 <212> TYPE: PRT
163 <213> ORGANISM: Murine
165 <400> SEQUENCE: 4
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168 1               5                   10                  15
171 Val Leu Ser Gln Val Gln Leu Lys Glu Ser Gly Pro Gly Leu Val Ala
172         20                  25                   30
175 Pro Ser Gln Ser Leu Ser Ile Thr Cys Thr Val Ser Gly Phe Ser Leu
176         35                  40                   45
179 Thr Asn Tyr Asp Ile Asn Trp Val Arg Gln Pro Pro Gly Lys Gly Leu
180     50                  55                   60
183 Glu Trp Leu Gly Ile Ile Trp Gly Asp Gly Ser Thr Asn Tyr His Ser
184 65                  70                   75                   80
187 Ala Leu Ile Ser Arg Leu Ser Ile Ser Lys Asp Asn Ser Lys Ser Gln
188                 85                  90                   95
191 Ile Phe Leu Lys Leu Asn Ser Leu Gln Thr Asp Asp Thr Ala Thr Tyr
192             100                 105                  110
195 Tyr Cys Asn Tyr Pro Cys Leu Tyr Phe Tyr Gly Met Asp Tyr Trp Gly
196         115                 120                   125
199 Gln Gly Thr Ser Val Thr Val Ser Ser Ala Ser
200         130                 135
203 <210> SEQ ID NO: 5
204 <211> LENGTH: 411
205 <212> TYPE: DNA
206 <213> ORGANISM: Murine
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209 <221> NAME/KEY: CDS
210 <222> LOCATION: (14)..(406)
212 <400> SEQUENCE: 5
213 ggggatatcc acc atg gat ttt caa gtg cag att ttc agc ttc ctg cta       49
214             Met Asp Phe Gln Val Gln Ile Phe Ser Phe Leu Leu
215              1               5                   10
217 atc agt gtc aca gtc ata ttg acc aat gga gaa att ttg ctc acc ccg      97
218 Ile Ser Val Thr Val Ile Leu Thr Asn Gly Glu Ile Leu Leu Thr Pro
219         15                  20                   25
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RAW SEQUENCE LISTING   DATE: 07/05/2001
PATENT APPLICATION: US/09/881,823   TIME: 11:17:40

Input Set : A:\PTO.txt
Output Set: N:\CRF3\07052001\I881823.raw

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221 tct cca gca atc ata gct gca tct cct ggg gaa aag gtc acc atc acc    145
222 Ser Pro Ala Ile Ile Ala Ala Ser Pro Gly Glu Lys Val Thr Ile Thr
223     30                      35                  40
225 tgc agt gcc agc tca agt gtt agt tac atg aac tgg tac cag cag aaa    193
226 Cys Ser Ala Ser Ser Ser Val Ser Tyr Met Asn Trp Tyr Gln Gln Lys
227 45                      50                  55                  60
229 cca gga tct tcc ccc aaa atc tgg att tat ggt gta tcc aac ctg gct    241
230 Pro Gly Ser Ser Pro Lys Ile Trp Ile Tyr Gly Val Ser Asn Leu Ala
231                         65                  70                  75
233 tct gga gtt cct gct cgc ttc agt ggc agt ggg tct ggg aca tct ttc    289
234 Ser Gly Val Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Ser Phe
235             80                      85                  90
237 tct ttc aca atc aac agc atg gag gct gaa gat gtt gcc act tat tac    337
238 Ser Phe Thr Ile Asn Ser Met Glu Ala Glu Asp Val Ala Thr Tyr Tyr
239         95                      100                 105
241 tgt cag caa agg agt agt tac cca ttc acg ttc ggc tcg ggg acc aag    385
242 Cys Gln Gln Arg Ser Ser Tyr Pro Phe Thr Phe Gly Ser Gly Thr Lys
243     110                     115                 120
245 ctg gaa ata aaa cgt aag tcg acgct                                   411
246 Leu Glu Ile Lys Arg Lys Ser
247 125                     130
250 <210> SEQ ID NO: 6
251 <211> LENGTH: 131
252 <212> TYPE: PRT
253 <213> ORGANISM: Murine
255 <400> SEQUENCE: 6
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258 1               5                   10                  15
261 Val Ile Leu Thr Asn Gly Glu Ile Leu Leu Thr Pro Ser Pro Ala Ile
262             20                  25                  30
265 Ile Ala Ala Ser Pro Gly Glu Lys Val Thr Ile Thr Cys Ser Ala Ser
266             35                  40                  45
269 Ser Ser Val Ser Tyr Met Asn Trp Tyr Gln Gln Lys Pro Gly Ser Ser
270     50                  55                  60
273 Pro Lys Ile Trp Ile Tyr Gly Val Ser Asn Leu Ala Ser Gly Val Pro
274 65                  70                  75                  80
277 Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Ser Phe Ser Phe Thr Ile
278             85                  90                  95
281 Asn Ser Met Glu Ala Glu Asp Val Ala Thr Tyr Tyr Cys Gln Gln Arg
282         100                 105                 110
285 Ser Ser Tyr Pro Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys
286     115                 120                 125
289 Arg Lys Ser
290     130
293 <210> SEQ ID NO: 7
294 <211> LENGTH  465
295 <212> TYPE: DNA
296 <213> ORGANISM: Murine
298 <220> FEATURE:
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RAW SEQUENCE LISTING   DATE: 07/05/2001
PATENT APPLICATION: US/09/881,823   TIME: 11:17:40

Input Set : A:\PTO.txt
Output Set: N:\CRF3\07052001\I881823.raw

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305                  1               5                  10
307 cct gca tat gtc ctc tcc cag gtt act ctg aaa gag tct ggc cct ggg        99
308 Pro Ala Tyr Val Leu Ser Gln Val Thr Leu Lys Glu Ser Gly Pro Gly
309     15                  20                  25
311 ata ttg cag ccc tcc cag acc ctc agt ctg act tgt tct ttc tct ggg       147
312 Ile Leu Gln Pro Ser Gln Thr Leu Ser Leu Thr Cys Ser Phe Ser Gly
313 30                  35                  40                  45
315 ttt tca ctg aga act tat ggt ata gga gta ggc tgg att cgt cag cct       195
316 Phe Ser Leu Arg Thr Tyr Gly Ile Gly Val Gly Trp Ile Arg Gln Pro
317                 50                  55                  60
319 tca ggg agg ggt ctg gag tgg ctg gca cac att tgg tgg aat gat aat       243
320 Ser Gly Arg Gly Leu Glu Trp Leu Ala His Ile Trp Trp Asn Asp Asn
321                 65                  70                  75
323 aag tac tat aac aca gtc ctg aag agc cgg ctc aca atc tcc aag gat       291
324 Lys Tyr Tyr Asn Thr Val Leu Lys Ser Arg Leu Thr Ile Ser Lys Asp
325             80                  85                  90
327 acc tcc aac aac cag gta ttc ctc aag atc gcc agt gtg gac act gca       339
328 Thr Ser Asn Asn Gln Val Phe Leu Lys Ile Ala Ser Val Asp Thr Ala
329     95                  100                 105
331 gat act gcc aca tac tac tgt gcg cga ata gag ggg ggc tcg ggc tac       387
332 Asp Thr Ala Thr Tyr Tyr Cys Ala Arg Ile Glu Gly Gly Ser Gly Tyr
333 110                 115                 120                 125
335 gat gtt atg gac tac tgg ggt caa gga atc tca gtc acc gtc tct tca       435
336 Asp Val Met Asp Tyr Trp Gly Gln Gly Ile Ser Val Thr Val Ser Ser
337                 130                 135                 140
339 gct agc acaacacccc catctgtcga ccca                                     465
340 Ala Ser
344 <210> SEQ ID NO: 8
345 <211> LENGTH: 143
346 <212> TYPE: PRT
347 <213> ORGANISM: Murine
349 <400> SEQUENCE: 8
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352  1               5                  10                  15
355 Val Leu Ser Gln Val Thr Leu Lys Glu Ser Gly Pro Gly Ile Leu Gln
356             20                  25                  30
359 Pro Ser Gln Thr Leu Ser Leu Thr Cys Ser Phe Ser Gly Phe Ser Leu
360         35                  40                  45
363 Arg Thr Tyr Gly Ile Gly Val Gly Trp Ile Arg Gln Pro Ser Gly Arg
364     50                  55                  60
367 Gly Leu Glu Trp Leu Ala His Ile Trp Trp Asn Asp Asn Lys Tyr Tyr
368 65                  70                  75                  80
371 Asn Thr Val Leu Lys Ser Arg Leu Thr Ile Ser Lys Asp Thr Ser Asn
372             85                  90                  95
```

FYI.

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY   DATE 07/05/2001
PATENT APPLICATION: US/09/881,823   TIME 11:17:41

Input Set : **A:\PTO.txt**
Output Set: **N:\CRF3\07052001\I881823.raw**

L:14 M:270 C: Current Application Number differs, Replaced Current Application No
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:637 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:641 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:839 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17